

Information Technology Laboratory

Corporate Web Farm

Background

The U.S. Army Engineer Research and Development Center's (ERDC) Information Technology Laboratory (ITL) has established a comprehensive Web hosting service termed the "Web Farm" to support ERDC and external customer requirements. The goal of the Web Farm is to offer a centralized, consolidated Web development and Web hosting solution that is cost shared among its supporting projects. The Web Farm is able to satisfy the client organizations' requirements for Web application, Web database, and Web site development, and/or reliable Web hosting. Use of the Web Farm gives clients access to cutting-edge technologies and experienced, welltrained Web application/database developers, while costs are reduced for local expertise and maintenance of expertise, as well as for the costs of purchasing, operating, and maintaining hardware, operating systems, and software.

Objective

Technology

To offer the aforementioned Web development and Web hosting environment as a Corporate Web Farm capable of serving a variety of customer requirements.

The Web Farm incorporates the following features and technologies:

- a. **Environment.** Housed in a data center environment that includes:
 - 24 X 7 operation.
 - Continuous power, battery, and generator backup.
- b. Architecture. A comprehensive architecture is being established for the Web Farm with servers for a variety of purposes including:
 - Internet, Intranet, and Extranet Web sites and applications.
 - Development, staging, production, COOP, and reverse proxy servers.
 - Web servers, application servers, and database servers.
- c. Platforms and Software. The Web Farm supports a variety of platforms and provides a set of easily adaptable software features including:
 - Apache Web servers on the Solaris operating system on Sun servers.
 - Microsoft IIS Web servers on the Windows 2000 operating system on Intel-based servers.
 - Oracle RDBMS and Oracle 9iAS.
 - User authentication and control through UPASS-managed user-ids and passwords for Corps applications and Web Farm user-ids and passwords to support non-Corps users.
 - Full text search capability for all supported Web sites.
- d. **Staffing.** Web Farm customers are supported by a qualified staff including:
 - Customer support specialists.
 - Army-certified UNIX, NT, and Oracle system administrators.
 - Database administrators.
 - Information Assurance specialists.

Benefits The Web Farm is a cost-reimbursable initiative based on funding provided by sponsors to meet their requirements for Web application, Web database, and Web site

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